**Allotment Assessment and Evaluation Report for**
**New Mexico Standards and Guidelines for Public Land Health**
**Campo Borrego (#622) – August 30, 2010**

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| **Permittee/Lessee** | | Authorization Number<br>currently unauthorized |
| **Livestock Use** | Preference AUMs | Allotment: 00622 — Active: to be determined — Suspended |
| | Period of Use / Kind of livestock | Allotment: Campo Borrego — Number/Kind: n/a — Season of Use: n/a |
| | Percent Public Land | AUMs are authorized at 100% public land |
| **Allotment Profile** | Physical Description | Allotment 622 is located approximately 9 miles west of Taos in Taos County, New Mexico.<br>Camp Borrego Allotment is 5 miles long with the eastern boundary being the west rim of the Rio Grande Gorge. It is relatively flat and dominantly covered by Artemisia tridentata (sagebrush). The elevation is approximately 6900 feet.<br><br>Five soil types are identified within the BLM parcels. Soils within the parcels are:<br><br>Fernando-Hernandez association, nearly level. The soil consists of loam and clay loams, with rooting depths over 60 inches. Parent materials of alluvium derived from mixed sources comprise this soil. Average annual precipitation ranges between 10 and 14 inches. Hazards for erosion are moderate. Vegetation is characterized by western wheat, galleta, blue grama, winter fat, fourwing saltbush and sagebrush.<br><br>Hernandez-Petaca association, gently sloping. The soil consists of loams, with rooting depths over 60 inches. Parent materials of alluvium derived from mixed sources comprise this soil. Average annual precipitation ranges between 10 and 14 inches. Hazards for erosion are slight to moderate. Vegetation is characterized by western wheat, needle and thread, galleta, blue grama and sagebrush.<br><br>Manzano clay loam, 0 to 5 percent slopes. This soil consists of clays loams, with rooting depths over 60 inches. Parent material of mixed alluvium comprises this soil. Average annual precipitation in this area ranges from 12 to 14 inches. Vegetation is characterized by western wheat, blue grama, galleta, sideoats grama and sagebrush.<br><br>Montecito-Rock outcrop complex, moderately steep. The soil consists of loams, with rooting depths over 60 inches. Parent materials of weathered basalt and eolian materials comprise this soil and the rock outcrops consist of folded, broken and |

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| | | exposed basalt flows. Average annual precipitation ranges between 13 and 15 inches. Vegetation is characterized by pinyon, juniper, sideoats grama, galleta, western wheat, and blue grama.<br><br>Sedillo-Silva association, strongly sloping. These soils consist of loams, with rooting depths over 60 inches. Parent material formed from mixed alluvium and eolian material comprises this soil. Average annual precipitation in this area ranges from 10 to 12 inches. Vegetation is characterized by western wheat, blue grama, and rabbitbrush. |
| | Land Status Acreage | BLM 2178 State 661 Private 638 |
| | Management Objectives | The allotment is under a 'Custodial' ('C') management category. 'C' category allotments have evidence of a "not apparent" to "upward" long term trend, have no significant resource conflicts and have a low potential for improvement in vegetative production. |
| | Key Forage Species | Blue grama, western wheatgrass, sideoats grama, galleta |
| | Grazing System | No system is used at this time due to being unpermitted. Historically sheep used the allotment in the spring and fall. |
| **Current Conditions / Management** | Actual Use | Actual use reports were not submitted. This allotment has been vacant since 1992. Historically 120 AUMs were permitted for this allotment. |
| | Utilization | Due to the lack of staff, utilization studies have not been conducted. |
| | Climate | The past water year (Oct. 1, 2009 – Sept. 30, 2010) the average temperature has been slightly below average (0 to 1 degrees Fahrenheit) and precipitation below average (0 to 3 inches of precipitation). The winter was slightly wetter (0 to 1.5 inches of precipitation) and was colder (2 to 3 degrees Fahrenheit). The spring was drier (0.75 to 1.5 inches of precipitation) and was colder (1 to 2 degrees Fahrenheit). This should provide below average plant growth for cool season plants. The summer precipitation was below average (0 to 1.5 inches) and slightly warmer (1 to 2 degrees Fahrenheit) which should provide below normal growth for warm season plants.<br><br>Global climate change resulting from increasing atmospheric $CO_2$ levels may accelerate rates of plant extinction and result in shifts in ecosystem structure (species diversity) and function. We anticipate that our monitoring efforts will track vegetation shifts allowing for management modifications to address local range impacts resulting from global climate change. |
| | Trend | In 2010 monitoring transects and photo points were placed in the allotment to establish vegetation trend. The full findings are kept in the allotment file at the Taos Field Office, but are summarized below. |

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<tr><td></td><td></td><td>
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<tr><td>Plot #1</td><td>2010</td></tr>
<tr><td>Ground Cover</td><td>(%)</td></tr>
<tr><td>Bare Ground</td><td>80</td></tr>
<tr><td>criptogams</td><td>1</td></tr>
<tr><td>gravel</td><td>3</td></tr>
<tr><td>rock</td><td>0</td></tr>
<tr><td>litter</td><td>13</td></tr>
<tr><td>GUSA (Snakeweed)</td><td>1</td></tr>
<tr><td>ARTR (Sagebrush)</td><td>1</td></tr>
<tr><td>MUTO (Ring Muhly)</td><td>1</td></tr>
<tr><td>Species Composition</td><td>(%)</td></tr>
<tr><td>GUSA (Snakeweed)</td><td>34</td></tr>
<tr><td>ARTR (Sagebrush)</td><td>53</td></tr>
<tr><td>MUTO (Ring Muhly)</td><td>1</td></tr>
<tr><td>BOGR (Blue Grama)</td><td>10</td></tr>
<tr><td>OPPO (Pricklypear)</td><td>1</td></tr>
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</td></tr>
<tr><td></td><td>Riparian</td><td>There are no riparian areas within this allotment.</td></tr>
<tr><td></td><td>Wildlife</td><td>Seasonal home ranges in the allotment include those for deer, elk, bear, bobcat, fox, coyote, small mammals and reptiles, bats, raptors, turkey vulture, songbirds, and a variety of insects.<br><br>Some dietary overlap occurs between wildlife and cattle; however, best management practices would ensure that forage production within this area can support both wildlife and livestock on a sustained basis.<br><br>This allotment has potential for future projects to enhance wildlife habitat through vegetation treatments and water developments.</td></tr>
<tr><td></td><td>Threatened and Endangered Species</td><td>It is determined that there are no federally listed threatened or endangered species likely to be found in the subject allotment. There is no designated critical habitat for any species listed by the USFWS within the allotment.<br><br>Special status species that are likely to be found on the allotment (seasonally) include bald eagle and ferruginous hawk.</td></tr>
<tr><td>Findings / Rationale for the New Mexico Standards for Public Land Health</td><td></td><td>A Rangeland Health Evaluation Matrix was completed on August 30, 2010. This evaluation matrix is from Technical Reference 1734-6 “Interpreting Indicators of Rangeland Health.” The actual matrix forms are available within the allotment file. Below is a summation of the information gathered by the on site evaluation. Within the Rangeland Health Attributes are three different categories of indicators. The categories include; Soil and Site Stability, Hydrologic Function and Biotic Integrity. The percent of indicator score</td></tr>
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| | | was created by multiplying an assigned value for departure from site descriptions/reference areas by the number of indicators at the level. Departure scores are categorized as: none to slight = 5, slight to moderate = 4, moderate = 3, moderate to extreme = 2 and extreme = 1. For example, if all indicators under Soil/Site Stability were rated none to slight (best condition), the equation would be 5(score)*10indicators=50/50*100 = 100% similarity, or what is expected based on an Ecological Site Description.<br><br>Soil and Site Stability<br>Six indicators were deemed None to Slight, three were deemed Slight to Moderate, zero were deemed Moderate, one was deemed Moderate to Extreme, and zero were deemed Extreme to Total.<br>Rating: 84%<br><br>Hydrologic Function<br>Five indicators were deemed None to Slight, two were deemed Slight to Moderate, one was deemed Moderate, two were deemed Moderate to Extreme, and zero were deemed Extreme to Total.<br>Rating: 80%<br><br>Biotic Integrity<br>Two indicators were deemed None to Slight, three were deemed Slight to Moderate, two were deemed Moderate, two were deemed Moderate to Extreme, and zero were deemed Extreme to Total.<br>Rating: 71%<br><br>Overall Rating: 78% |
| | Upland Standard | *Upland ecological sites are in productive and sustainable condition within the capability of the site. Upland soils are stabilized and exhibit infiltration and permeability rates that are appropriate for the soil type, climate, and landform. The kind, amount and/or pattern of vegetation provides protection on a given site to minimize erosion and assist in meeting Sate and Tribal water quality standards.*<br><br>This allotment is meeting the Upland Standard based on the above evaluation and information. Soils appear stable and erosion is no more than expected for the site. Vegetation is not preventing erosion; however, the flat landscape prevents runoff. Improving plant communities will help to facilitate better infiltration. |
| | Biotic Communities Standard | *Ecological processes such as hydrologic cycle, nutrient cycle, and energy flow support productive and diverse native biotic communities, including special status , threatened, and endangered species appropriate to site and species.*<br><br>This allotment is not meeting the Biotic Communities Standard |

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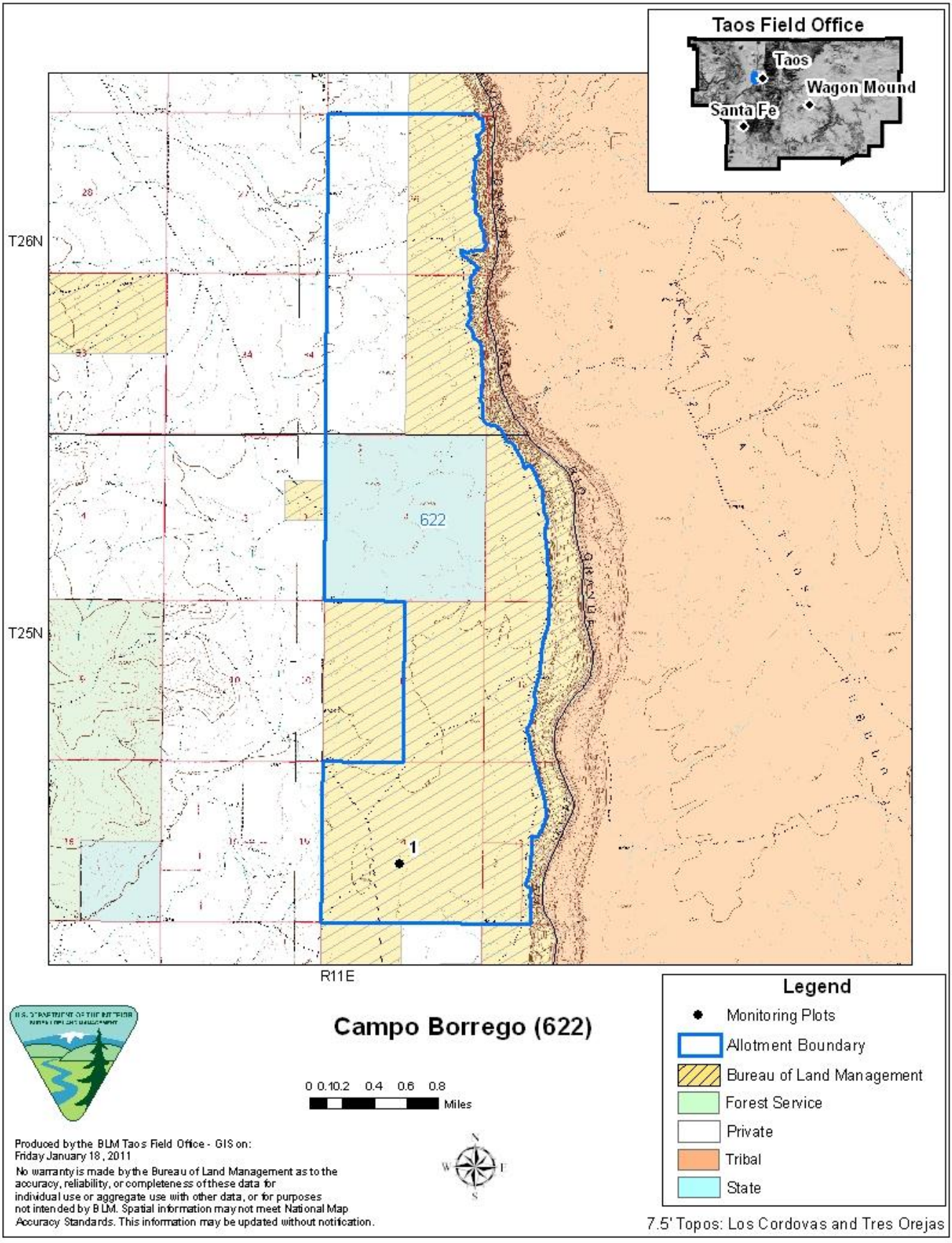
| | | based on the above evaluation and information. Artemisia tridentata (sagebrush) has taken over the site. Very few other species are present and populations of herbaceous species are low. Bare ground is moderately higher and litter amount is lower than expected for the site. Historic land management practices and changes in wild fire regimes have probably impacted the current conditions. |
| | Riparian Standard | *Riparian areas are in a productive, properly functioning and sustainable condition, within the capability of that site.*<br><br>The Riparian Standard does not apply to this allotment. No riparian area or vegetation is located within the allotment boundaries. |
| **Conclusion** | | The New Mexico Standards for public land health are not being met; therefore a Determination Document is warranted. No grazing has been authorized on the allotment to facilitate the Biotic Communities Standard not being met. Continued monitoring will help establish future trend. It is recommended that vegetation treatments be performed to improve wildlife habitat and promote herbaceous species. If an application for a grazing permit is received for this allotment the permitted AUMs should be based on current conditions and not historic numbers. |

**Consultation and Coordination**

This Assessment and Evaluation Report has been sent or given to the affected permitee(s) / lessee(s), the interested publics and the following interdisciplinary team members for input and review:

Merril Dicks – Archeologist
Scott Draney – Department of Game and Fish
Greg Gustina – Fish Biologist
Pam Herrera-Olivas – Wildlife Biologist
Tami Torres – Outdoor Recreation Planner
Jacob Young – Rangeland Management Specialist
Paul Williams – Archeologist
Valerie Williams – Wildlife Biologist

This document was prepared by: Derek Trauntvein – Rangeland Management Specialist


Taos Field Office
Taos
Wagon Mound
Santa Fe
T26N
T25N
622
1
R11E
Campo Borrego (622)
0 0.10.2 0.4 0.6 0.8
Miles
Legend
Monitoring Plots
Allotment Boundary
Bureau of Land Management
Forest Service
Private
Tribal
State
Produced by the BLM Taos Field Office - GIS on:
Friday January 18, 2011
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7.5' Topos: Los Cordovas and Tres Orejas